

Nuclear spin quasienergies in solids and Mossbauer gamma transitions

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Abstract

Quasienergy spin states representation as a method of describing the influence of nuclear spin coherent dynamics on Mossbauer gamma radiation parameters is considered. The conditions of inducing coherent alternating fields with large scale amplitude on nuclei of magnetic materials are studied.

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Keywords

Gamma optics, Magnetization reversal, Mossbauer transitions, Nonlinear spin dynamics, Quasienergy states, Radiofrequency excitation